



CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

SUPER FAST RECOVERY RECTIFIER

VOLTAGE RANGE 200 - 400 Volts CURRENT 10 Amperes

**U10P20GP
THRU
U10P40GP**

FEATURES

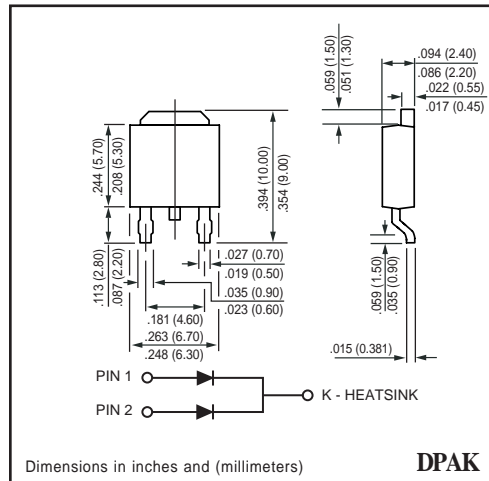
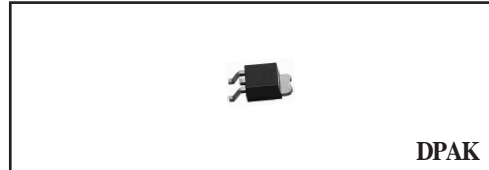
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Dual rectifier construction, positive centertap
- * Glass passivated chip junctions
- * Low power loss
- * Low forward voltage, high current capability
- * High surge current capability
- * Superfast recovery times for high efficiency
- * High temperature soldering guaranteed : 260°C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DPAK molded plastic
Terminals: Lead solderable per MIL-STD-750, Method 2026
Polarity: As marked
Weight: 1.7 grams (Approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.



MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	U10P20GP	U10P30GP	U10P40GP	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	200	300	400	Volts
Maximum RMS Voltage	VRMS	140	210	280	Volts
Maximum DC Blocking Voltage	Vdc	200	300	400	Volts
Maximum Average Forward Rectified Current	Io	10.0			Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	150			Amps
Typical Junction capacitance per leg (NOTE 1)	CJ	60			pF
Typical thermal resistance (NOTE 2)	R θJC	3.0			°C / W
Operating and Storage Temperature Range	TJ, TSTG	-55 to +150			°C

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	U10P20PT	U10P30PT	U10P40PT	UNITS
Maximum Instantaneous Forward Voltage at 5.0 A DC	VF	0.975	1.30		Volts
Maximum DC reverse current at rated DC blocking voltage per leg	IR	5.0			uAmps
		150			
Maximum reverse recovery time (NOTE 3) per leg	trr	35			nS

- NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
 2. Thermal resistance from junction to case per leg mounted on heatsink
 3. Reverse recovery test conditions : IF = 0.5 A, Ir = -1.0 A, Irr = -0.25 A.

RATING CHARACTERISTIC CURVES (U10P20GP THRU U10P40GP)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

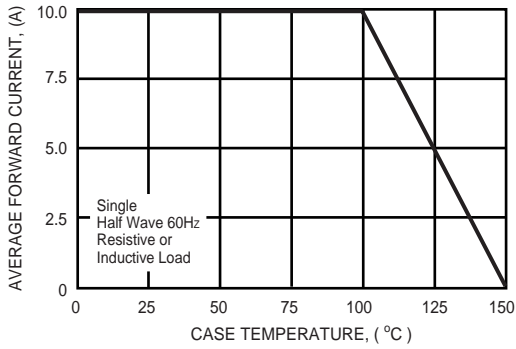


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

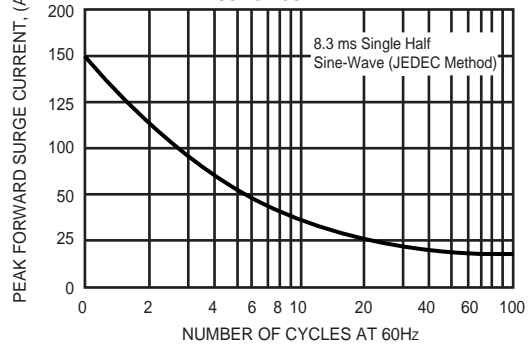


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

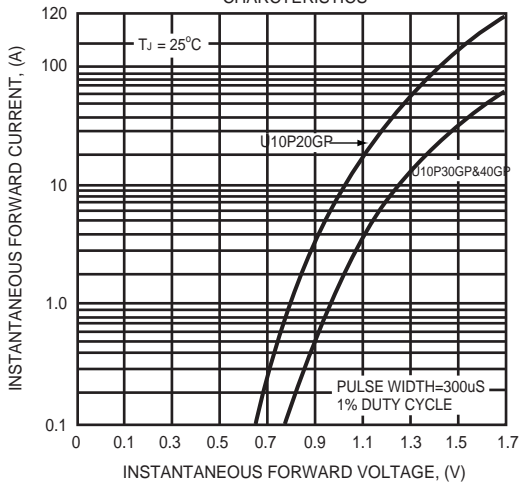


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

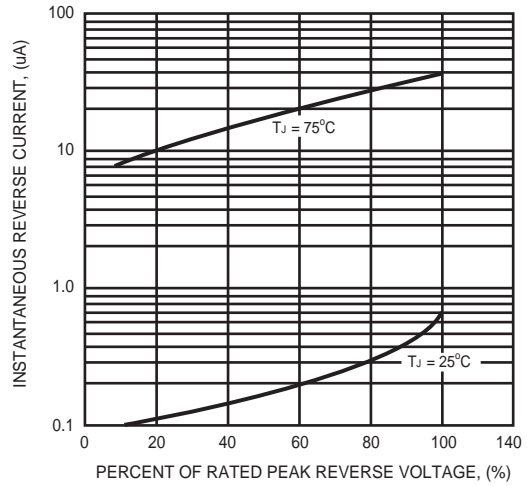


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

